



Docket No.: 51023-023

PATENT

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of	:	Customer No.: 20277
Masamichi YAMAMOTO, et al.	:	Confirmation No.: 1224
Application No.: 10/506,425	:	Group Art Unit: 1751
Filed: September 02, 2004	:	Examiner: Thomas Jaison P.
For: ANISOTROPIC CONDUCTIVE FILM AND METHOD OF PRODUCING THE SAME	:	

**REQUEST FOR CONTINUED EXAMINATION**

Mail Stop RCE  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450  
Sir:

This is a response to the final Office Action dated December 14, 2006. A Request for Continued Examination (RCE) of the above-referenced patent application is hereby made pursuant to 37 C.F.R. § 1.114. It is respectfully requested that the RCE be approved.

Please charge the fee due under 37 C.F.R. § 1.17(e) to Deposit Account 500417. Along with this request, Applicant submits a Declaration under 37 C.F.R. § 1.132 by Hideaki Toshioka, one of the named inventors in the present patent application. The Declaration highlights the difference in configuration of the conductive films of Jin et al. to the anisotropic conductive films of the present invention, and the data in the Declaration show this difference.

Samples 1-3 represent the teachings of the Jin et al. reference. The samples are compared to Exhibit 4 in the present application. The results of the comparison are summarize in Table 1 on page 6 of the Declaration and confirm that using the two particles described in Jin et al. does

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not provide an anisotropic conductive films having excellent connecting resistance and good insulating resistance achieved by the conductive films of the present invention.

More specifically, Sample 1 employs 2  $\mu\text{m}$  diameter Ni particles, which corresponds to the first particles of Jin et al.. When compared to Example 4 of the present invention, Sample 1 shows that poor conductivity in the thickness direction of the film (connecting resistance), and poor insulating properties (insulating resistance) in the plane direction of the film. The reason for the poor insulating properties is that a resin is interposed between the Ni particles. In addition, the results show that Ni particles do not maintain their orientation when the resin is cured. Also, the Ni particles flow into the recess between adjacent electrodes thereby causing a short circuit between both of the electrodes. This contributes to the poor insulating properties in the plane direction of the film.

Samples 2 and 3 use Ni particles having a 4  $\mu\text{m}$  particle diameter, which corresponds to the second particles of Jin et al. The data shows that the Ni particles are stuck in the recess between adjacent electrodes, thus causing a short circuit between both of the electrodes. Therefore, the data confirms that the pitch between the electrodes cannot be made smaller than the particle diameter of the second particles.

The Declaration shows that the teachings of Jin et al. do not result in obtaining conductive films having the same good anisotropic conductivity as that of the present invention. More specifically, in the case of the combined use, i.e., the second particles having a larger particle diameter, the larger particle size is an impediment so that it is impossible to reduce the